

READING THE METER

July 8, 2020

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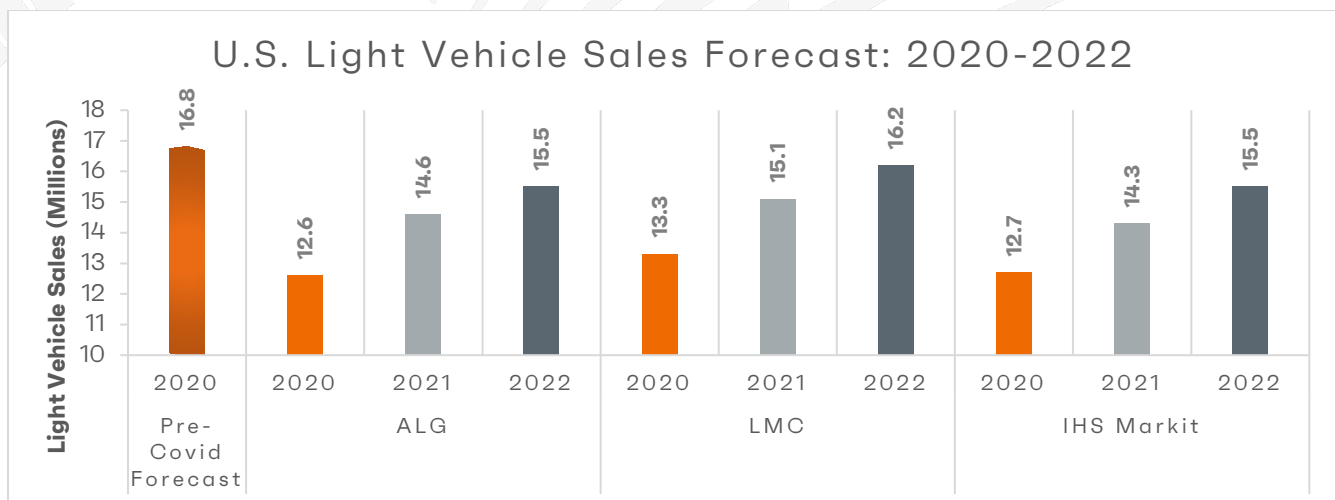
Forecast Meter

Forecast Summary (Updated 7/2)

| 2020 Sales, ⁱ Extended Sales Forecast ⁱⁱ and Production Forecasts ⁱⁱⁱ | | |
|--|----------------------------|--|
| | U.S. Sales & Forecasts | North American Production |
| March | 992,392 (-33% YoY) | 1.01 million units (-34% YoY) |
| April | 707,852 (-48.7% YoY) | 8,463 (-99.4% YoY) |
| May | 1,114,931 (-29.5% YoY) | 248,602 (-83% YoY) |
| June | 1,103,791 (-24% YoY) | N/A |
| 1st Quarter | 3,476,512 (-12.7% YoY) | 3.86 million units (-11.7% YoY) |
| 2nd Quarter | 2,948,410 (-33.3% YoY) | 1.43 million units (-67.5% YoY) Estimate |
| 3rd Quarter Estimate | 13-14M SAAR (-20%-26% YoY) | 3.62 (-12.2% YoY) / 9.13 through September (-29.2 YoY) |
| 2020 Full Year Estimate | 12.6-14.3M (-15%-26% YoY) | 12.3M (-27% YoY) |

U.S. Light Vehicle Sales Outlook (Updated 6/3)

Wards Intelligence^{iv}: “The forecast for U.S. light-vehicle sales in 2020 has been adjusted downward 100,000 units to 13.3 million, based on the latest from Wards Intelligence partner LMC Automotive. Related to tweaks to the economic outlook, the 2021 forecast also was downgraded 100,000 units and stands at 15.1 million. The 2020 revision adjusts for anticipated short-term inventory shortages caused by a combination of slower production ramp-ups and better-than-expected sales since the impact of the virus started in mid-March that will further limit product availability through the end of the third quarter. Although projecting demand for the remainder of 2020 remains a fluid exercise, currently, based on seasonally adjusted annual rates, sales are not expected to begin strong sequential growth until the fourth quarter.”



North American Production Outlook (Updated 7/2)

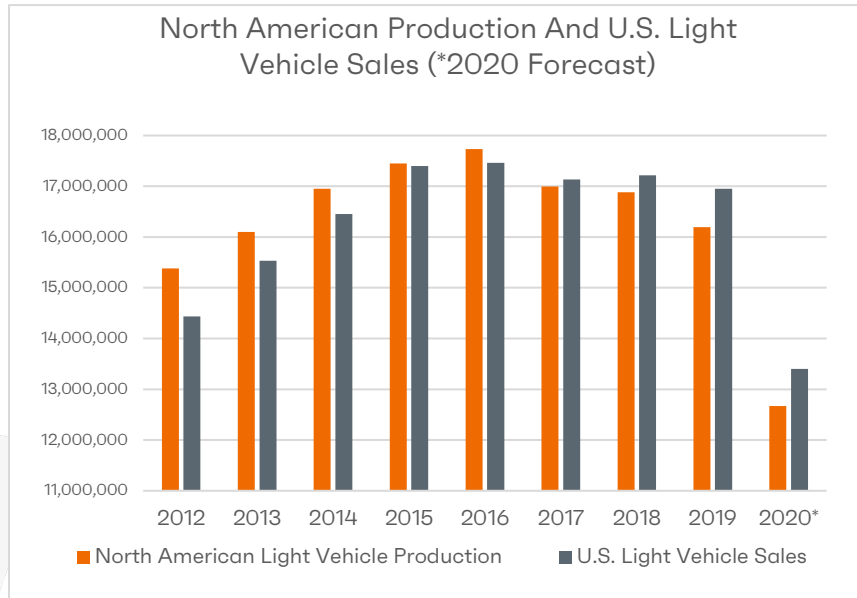
North America Production*:

“[W]ith automakers in general appearing to be doing a good job of ramping up production amidst precautions to keep workers safe on the factory floor, as well as take care of any breaks in the supply chain, the outlook for combined production of light-vehicles and medium-/heavy-duty trucks in the third quarter has been raised 196,200 units to 3.81 million, 7.5% below like-2019.

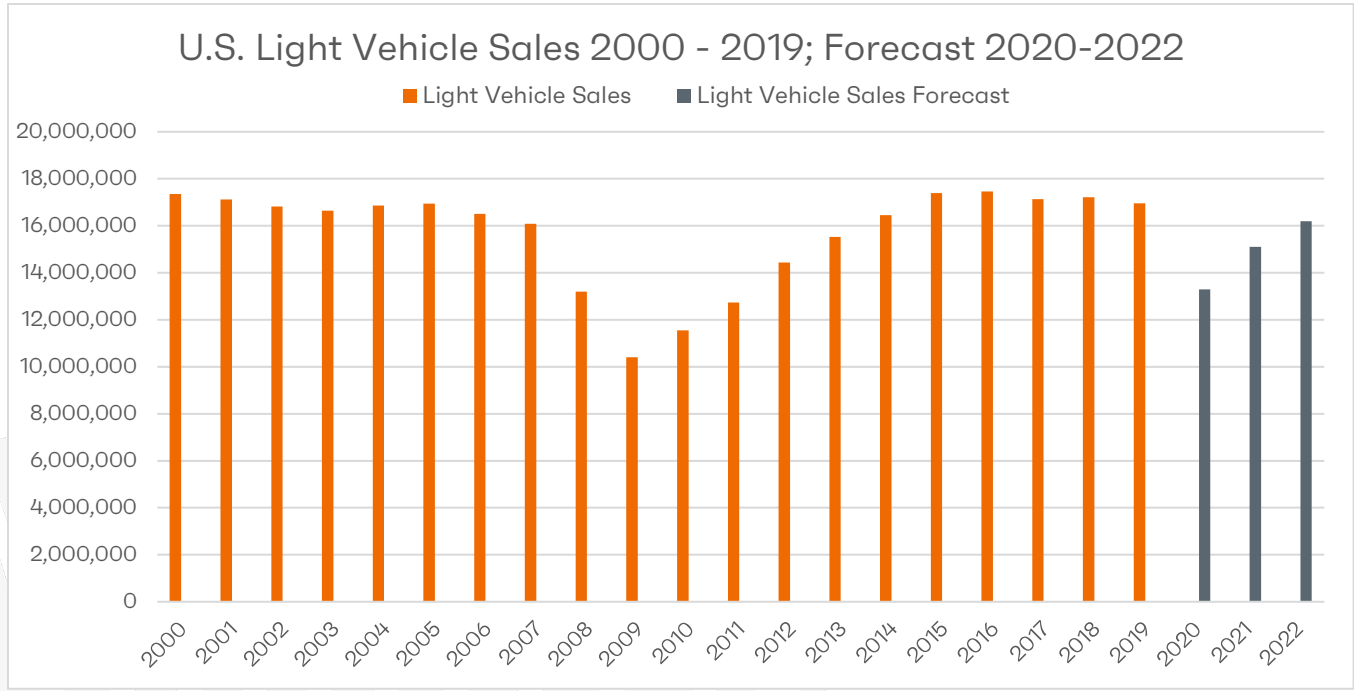
However, there was an offset in Q2 due to an underbuild from expectations in May that largely led to a 189,800-unit reduction to the April-June estimate, pulling down its total to 1.43 million, 67.5% below the same year-ago period.

The Q2 total included output of just 18,617 units in April, as nearly every assembly plant closed for the entire month due to the Covid-19 virus. Output in May total 264,978 units, down 83% year-over-year, and estimated June production of 1.14 million units is down 22.1%.

There still is expected to be some sluggishness throughout Q3 as manufacturers adjust factory output to Covid-19 conditions. Furthermore, while output will be boosted by the cancellation of vacation shutdowns at several plants, it also will be limited by some short- and long-term shutdowns, and gradual ramp-ups, at plants being retooled for major new or redesigned products, especially at Ford, General Motors and Nissan. Production through the first nine months of 2020 is projected to total 9.13 million units, 29.2% below 9-month 2019’s 12.89 million.”



Past 20 years of U.S. Auto Sales (New 7/2)



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Work Stoppage Meter

North American Assembly Facility Operating Status (Updated 7/8)

With the opening of the final plants in Mexico, automakers have resumed production at all plants across North America. The extent to which production has ramped up or employment has been reinstated is unknown. The summary chart assumes full employment for those plants that have reopened. We will continue to monitor the operational status of assembly facilities.

To view the most updated information on plant operating status, please click [here](#).

| North American Assembly Facilities (7-8-20) | | | |
|--|----------------------------------|---------------|--------------------------|
| Country | Metric | Number | Percent of totals |
| U.S. | U.S. Employment | 176,070 | |
| | Closed 7/8/2020 | - | 0% |
| | Number of plants total | 44 | |
| | Number of plants Closed 7/8/2020 | - | 0% |
| Mexico | Mexico Employment | 70,665 | |
| | Closed 7/8/2020 | - | 0% |
| | Number of plants total | 18 | |
| | Number of plants Closed 7/8/2020 | - | 0% |
| Canada | Canada Employment | 31,626 | |
| | Closed 7/8/2020 | - | 0% |
| | Number of plants total | 7 | |
| | Number of plants Closed 7/8/2020 | - | 0% |
| North America | Total Employment | 278,361 | |
| | Closed 7/8/2020 | - | 0% |
| | Number of plants total | 69 | |
| | Number of plants Closed 7/8/2020 | - | 0% |

Assumes full employment at open plants

Market Meter

U.S. Light Vehicle Sales (Updated 7/8)

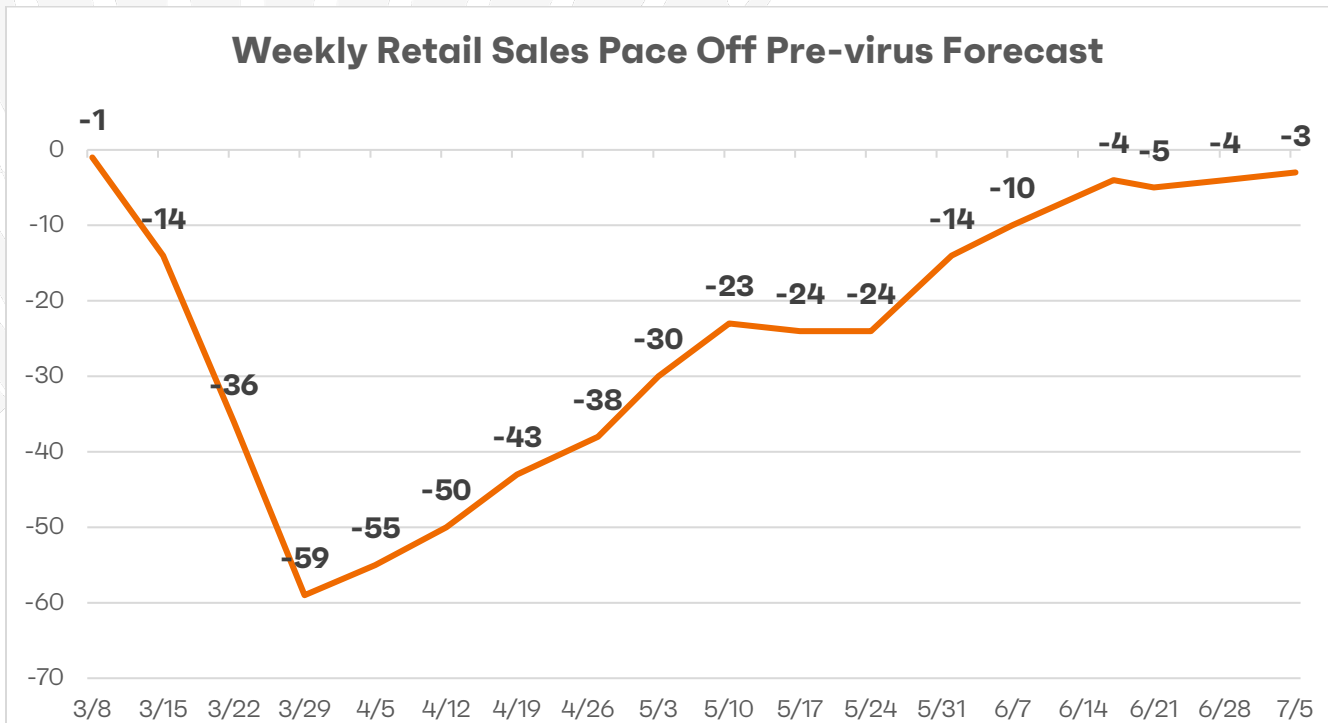
Weekly Sales ^{vii}

J.D. Power Weekly Update: “For the week ending July 05, retail sales were 3% below the pre-virus forecast, largely in-line with the prior four weeks.

“Customer-facing transaction price decreased \$339 from last week to \$34,614. The result for the current week ending July 05 is 3.7% above the same week in 2019.

“Incentive spending per unit for the week ending July 05 was \$4,337, a decrease of \$70 from the prior week. 84-month APR mix of all retail sales fell a further 0.3ppts to 7.4%, its lowest mark since mid-March.

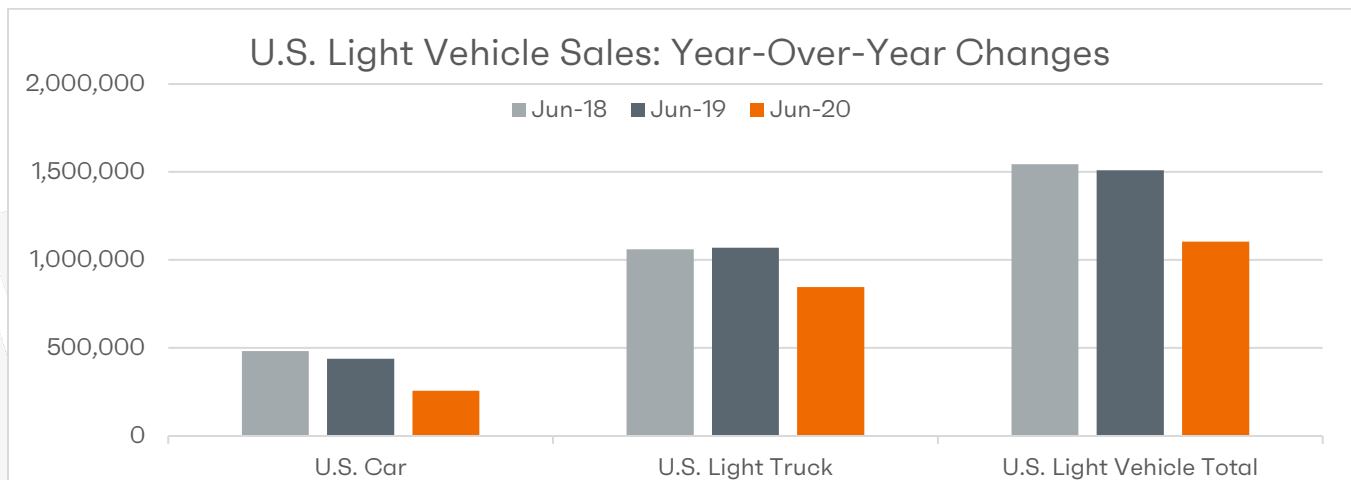
“While lease mix improved in the week ending July 05, it remains far below pre-virus levels with only 28.1% of consumers opting for a lease. For reference, nearly 33% of all consumers took leases in the same week in 2019.”



Monthly Sales^{viii}

Year over year, June light vehicle sales are down 24% from 2019. The segment trend continues to favor light trucks over cars, with trucks capturing more three-quarters of the market (76.7%), and gaining nearly 6% market share over 2019, however the overall truck volume was down more than 223,000.

“Since they bottomed out in April from the impact of the Covid-19 pandemic, U.S. light-vehicle sales surprised slightly on the upside for the second straight month in June, but month-to-month growth slowed as expected and results remained well below pre-virus levels.”^{ix}



Fleet Sales

WardsIntelligence: “Incentive activity likely is mostly responsible for estimated retail volume in June falling a relatively mild 6%, while fleet deliveries dropped a precipitous 73%.”^x

J.D. Power^{xi}: “Fleet sales of 92,775 represents a decline of 72% (-237k units) from May 2019. This represents a mix of only 8.2% of total sales.”

The baseline forecast from J.D. Power called for 13.4 million in retail sales and 3.4 million in fleet/other sales. With the revised forecast of 12.9-14.2 in total sales, fleet sales fall to a range from 1.6 million to 1.9 million, a decline of 44%-53% from the baseline.

J.D. Power Retail and Fleet Sales Forecast

| | Pessimistic Forecast | Optimistic Forecast | Pre-COVID Baseline Forecast |
|---|----------------------|---------------------|-----------------------------|
| Retail Sales Forecast (million) | 11.3 | 12.3 | 13.4 |
| Fleet/Other Sales Forecast (million) | 1.6 | 1.9 | 3.4 |
| Total Sales Forecast (million) | 12.9 | 14.2 | 16.8 |
| Fleet Percent of Total Sales | 12% | 13% | 20% |
| Retail Percent of Total Sales | 88% | 87% | 80% |
| Fleet Loss From Baseline of 3.4 (million) | -1.8 | -1.5 | - |
| Fleet Loss as % Baseline Fleet Sales | -53% | -44% | - |
| Fleet Loss as % Total Sales | -14.0% | -10.6% | - |

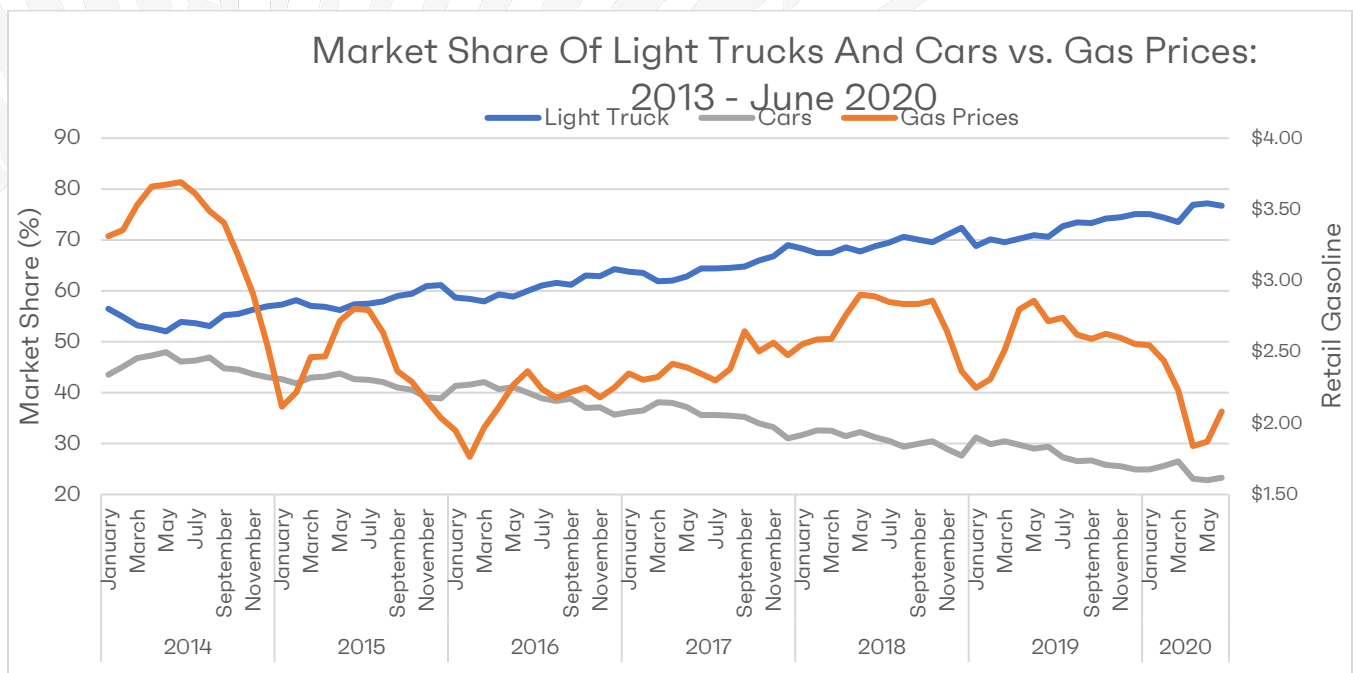
Rental Fleets: “Rental volume, which would have accounted for roughly 10% of new-vehicle sales in a 16.8 million-unit market, has all but dried up, and not coming back until business and vacation travel does. Additionally, automakers are trying to fill existing commercial orders but might not be able to meet all orders for ’20 model-year vehicles if production can’t be ramped up fast enough – some could be delayed until the ’21 model year, if not create more cancellations.”^{xii}

Segments vs. Gas Prices (Updated 7/2)

Monthly Sales For June: Light trucks accounted for almost 77% of sales in June, a nearly 6% gain in market share from a year ago.

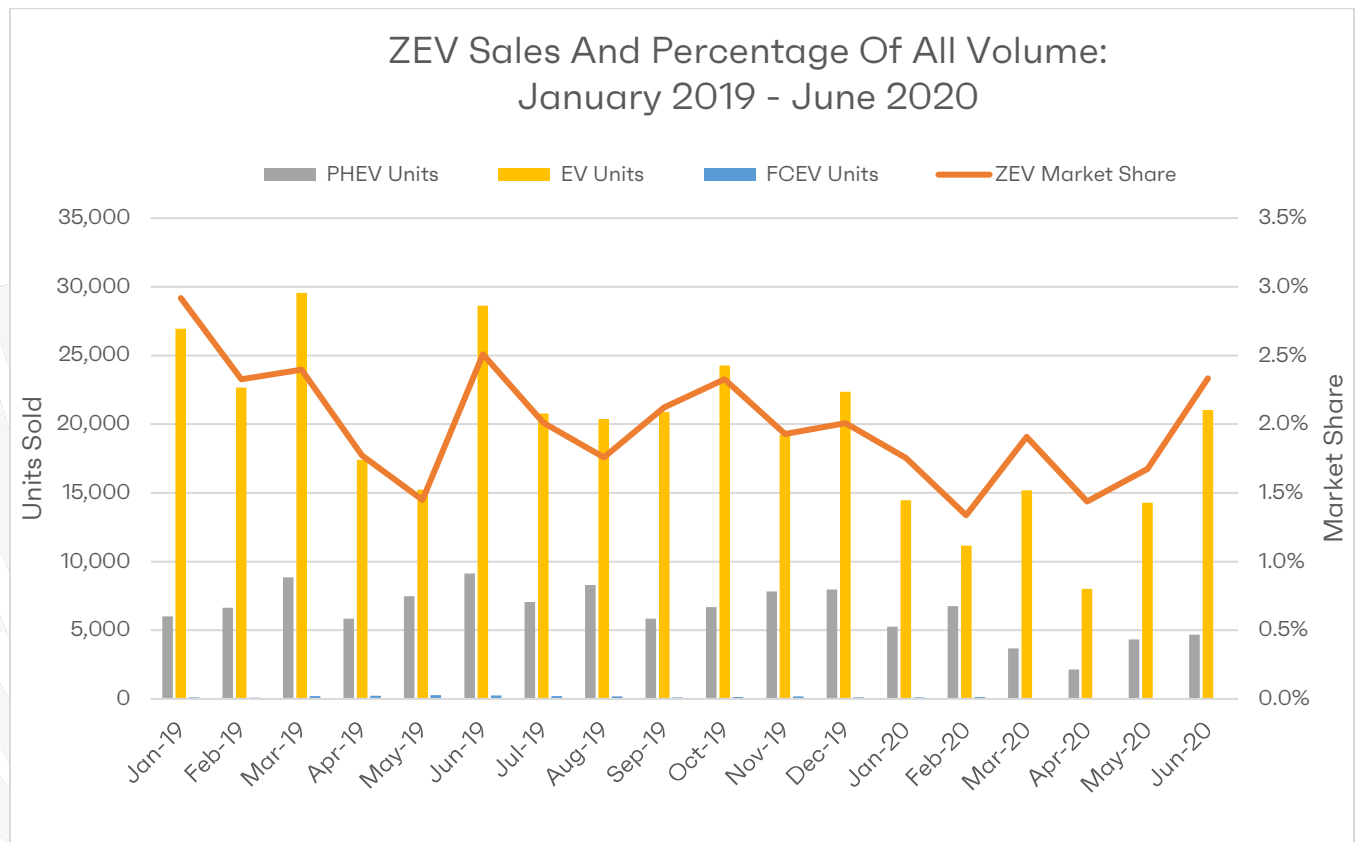
Segment Breakdown: “In June, except for vans, all truck segment groups recorded better year-over-year comparisons than cars, which were down 39.2% year-over-year. After posting sky-high market share in April-May, sales of pickups – down 22.2% year-over-year - still improved market share in June to 18.7% from like-2019’s 18.3%. That was despite an inventory total entering the month 50% below year-ago, compared with a 28% decline for the rest of the industry. CUVs fared best among all segment groups in June, declining 13.0% from like-2019.”^{xiii}

Historic Perspective: The upward trend in the popularity of light trucks over cars has been steady since 2013, when only 2% of annual market share separated the two segments^{xiv} and gas was over \$3.00^{xv} a gallon. As fuel prices dropped below the \$3.00 mark in mid-September 2014, light truck sales began to take off – and never looked back. Gas prices since have averaged only \$2.47 a gallon (through April 2020) and when combined with increased fuel economy for light trucks, an increase of 4 mpg since 2013^{xvi}, the perfect conditions existed to continue fueling light truck market growth.



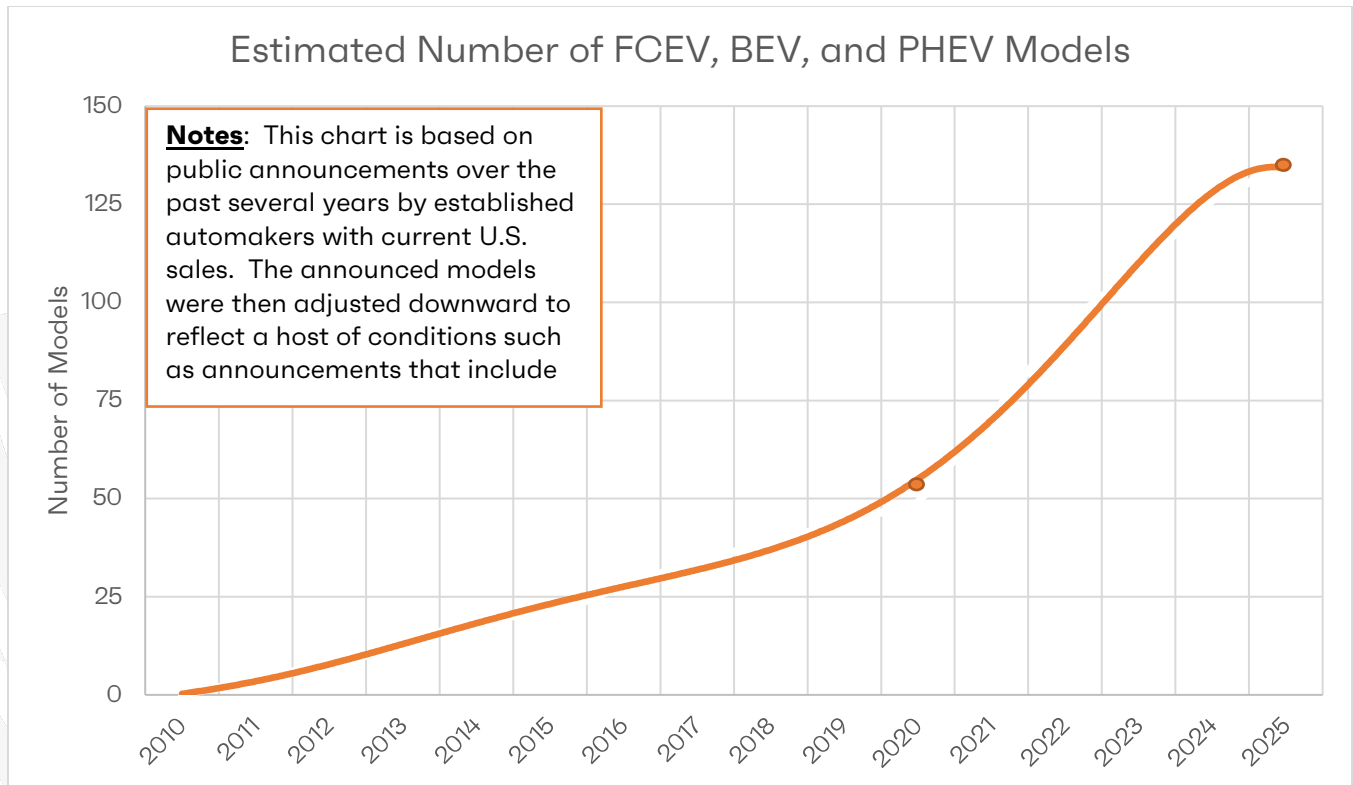
ZEV Powertrain Sales (Updated 7/2)

Sales of zero emission vehicles (BEV, PHEV, & Fuel Cell) accounted for only 2.3% of total vehicle sales in June 2020, down .2% from a year ago and up .7% from May 2020. Sales of battery electric vehicles led the way for ZEVs accounting for 1.9% of the total, up .3% from June 2019. Plug-in hybrids accounted for .4%, down .1% in market share, year-over-year.



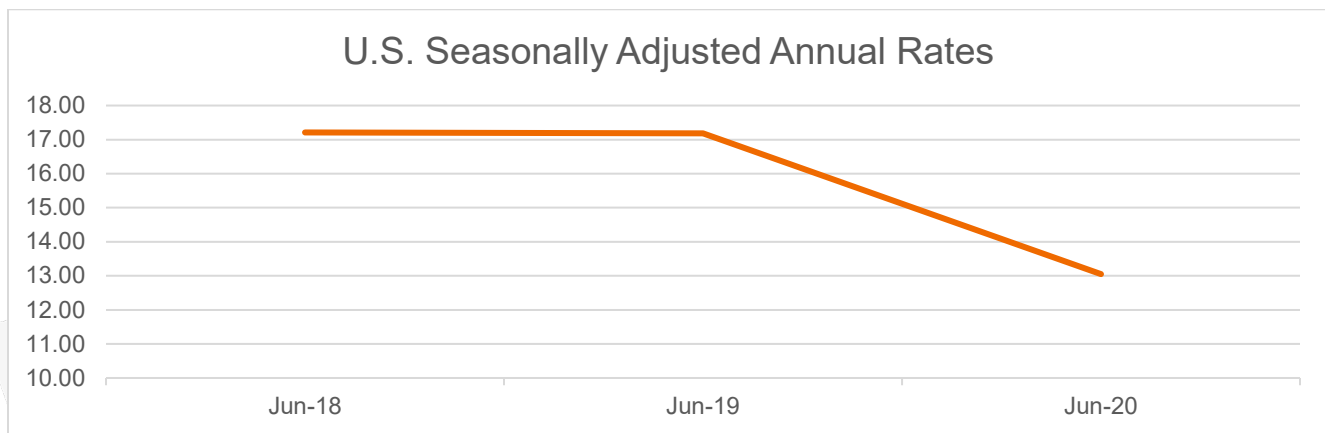
EV Model Availability (New 7/8)

Below is a visual that depicts the potential number of EV models that could be available in the United States through 2025 based on public announcements that were then adjusted to account for a host of stipulations.^{xvii}



Seasonally Adjusted Annual Rates (Updated 7/2)

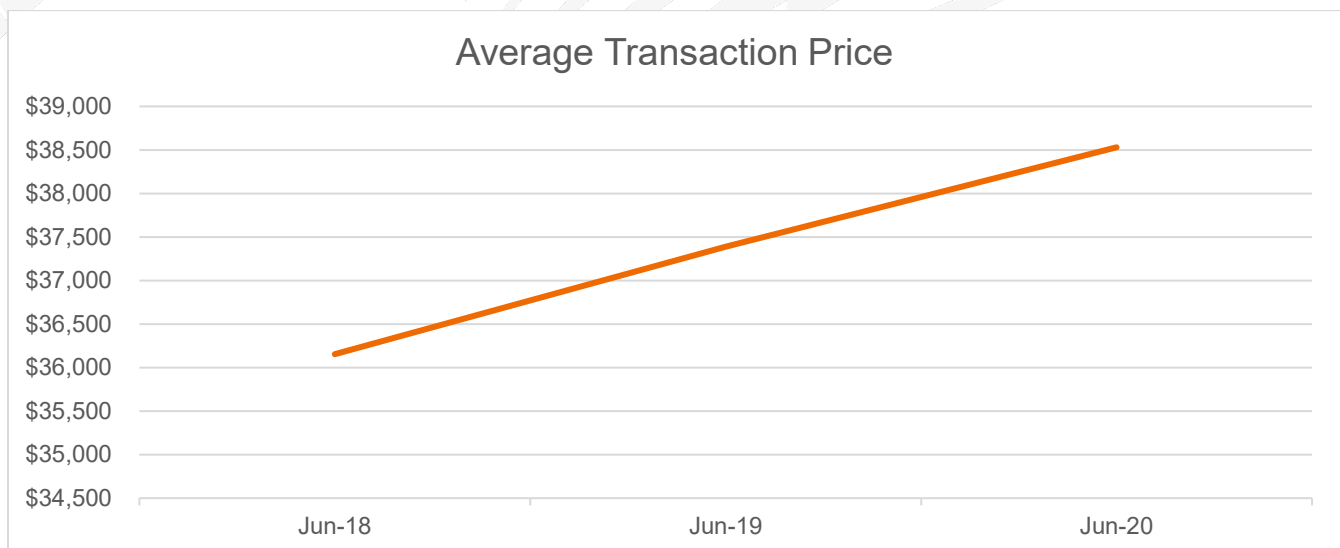
“U.S. light-vehicle sales totaled 1.10 million units in June, equal to a 13.1 million-unit seasonally adjusted annual rate. A significant improvement from May’s revised 12.3 million-unit SAAR but not like the month-to-month jump from April’s 8.7 million.”^{xviii}



Average Transaction Price (Updated 7/2)

Kelley Blue Book: “The valuation analysts at Kelley Blue Book today reported the estimated average transaction price for a light vehicle in the United States was \$38,530 in June 2020. New-vehicle prices increased \$1,141 (up 3.1%) from June 2019, while rising \$160 (up 0.4%) from last month.”^{xix}

Additional Insight From J.D. Power: “Customer-facing transaction price decreased \$339 from last week to \$34,614. The result for the current week ending July 05 is 3.7% above the same week in 2019.”^{xx}



Auto Loan Financing (Updated 7/2)

WardsIntelligence: “ALG’s initial estimate for June showed incentives were still ratcheted down from April when they soared 26% above the same year-ago month but remained relatively flat with May. However, incentives still were up a robust 9.2% year-over-year, compared with a smaller 3.2% increase for average transaction prices. Incentive activity likely is mostly responsible for estimated retail volume in June falling a relatively mild 6%, while fleet deliveries dropped a precipitous 73%.”^{xxi}

Financing Unchanged From Week Prior: After financing for the week of June 14, 2020 dropped to 4.32%, the lowest mark of the year on the 60-month new car financing interest rate, the week of June 24th saw the first increase in rates since the COVID crisis began. Rates for the week of July 1 are unchanged from the previous week. Rates are down .27% since the beginning of the year and down .44% from a year ago.^{xxii}

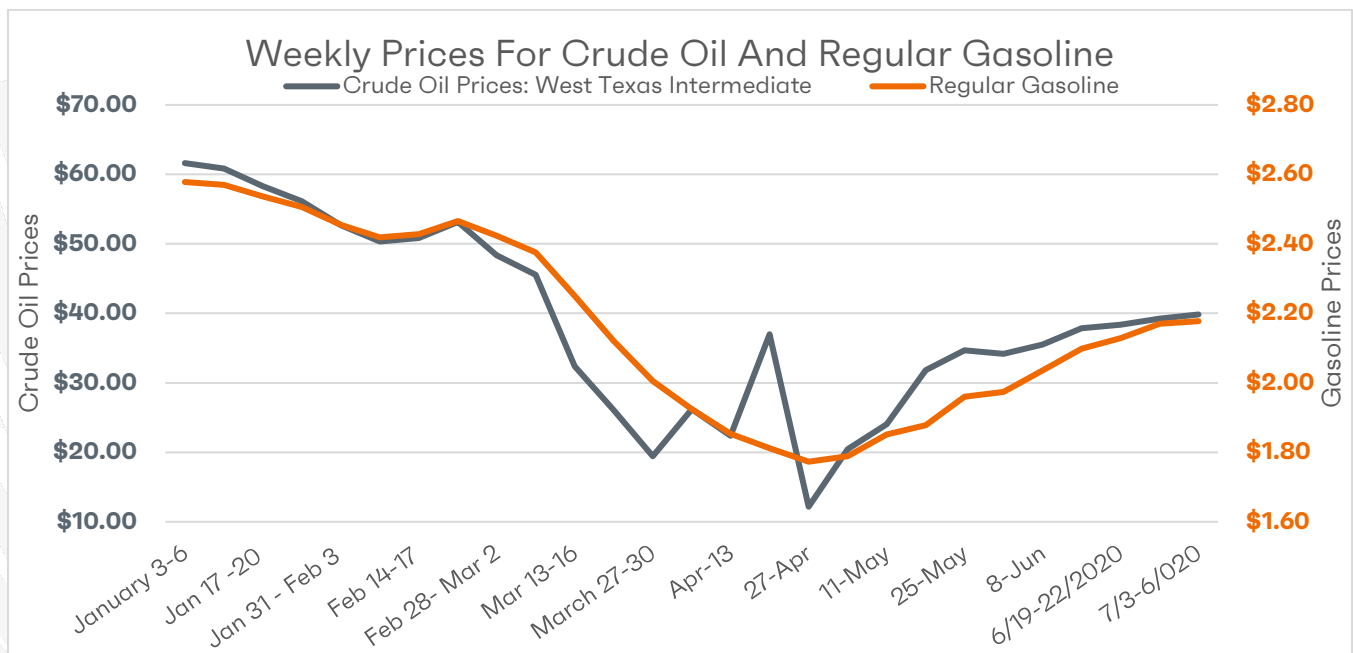
Additional Insight From J.D. Power: “Incentive spending per unit for the week ending July 05 was \$4,337, a decrease of \$70 from the prior week. 84-month APR mix of all retail sales fell a further 0.3ppts to 7.4%, its lowest mark since mid-March..”^{xxiii}

| Auto Loan Financing | | | | |
|---------------------|------------------|------------------|-------------------|--|
| Dates | 60-month new car | 48-month new car | 36-month used car | |
| 7/1/2020 | 4.33% | 4.33% | 4.73% | |
| 6/24/2020 | 4.33% | 4.33% | 4.73% | |
| 6/17/2020 | 4.32% | 4.30% | 4.72% | |
| 6/10/2020 | 4.34% | 4.38% | 4.76% | |
| 6/3/2020 | 4.35% | 4.32% | 4.73% | |
| 5/27/2020 | 4.35% | 4.32% | 4.73% | |
| 5/20/2020 | 4.36% | 4.33% | 4.74% | |
| 5/13/2020 | 4.36% | 4.34% | 4.74% | |
| 5/6/2020 | 4.37% | 4.35% | 4.75% | |
| 4/8-29/2020 | 4.37% | 4.35% | 4.75% | |
| 4/1/2020 | 4.42% | 4.39% | 4.89% | |
| 3/25/2020 | 4.42% | 4.38% | 4.90% | |
| 3/18/2020 | 4.43% | 4.39% | 4.91% | |
| 3/11/2020 | 4.46% | 4.42% | 4.95% | |
| 3/4/2020 | 4.49% | 4.45% | 4.98% | |
| 2/26/2020 | 4.56% | 4.51% | 5.02% | |
| 1/2/2020 | 4.60% | 4.55% | 5.10% | |
| 6/12/2019 | 4.77% | 4.71% | 5.26% | |
| One Week Change | 0.00% | 0.00% | 0.00% | |
| Two Week Change | 0.01% | 0.03% | 0.01% | |
| Change since 1/3/20 | -0.27% | -0.22% | -0.37% | |
| One Year Change | -0.44% | -0.38% | -0.53% | |

Crude Oil and Gas Prices (Updated 7/8)

Oil Forecasts For The Year Down More Than A Million Barrels A Day. “The U.S. cut its 2020 oil production forecast by more than 1 million barrels a day, as collapsing crude prices and plummeting demand threaten to shutter production in the country’s biggest fields. Production is expected to average 11.76 million barrels a day through December, down from a previous forecast of 12.99 million barrels, the Energy Information Administration said on Tuesday.”^{xxiv}

Oil And Gas Remain Low: Oil prices, as benchmarked at West Texas Intermediate, as well as gasoline prices, both continued their rebound in June and into July. For the week of July 6, oil was up above \$39 while gas was up to \$2.18. Compared to the start of the year, crude oil is down 35%, while gas prices are down 16%.^{xxv}

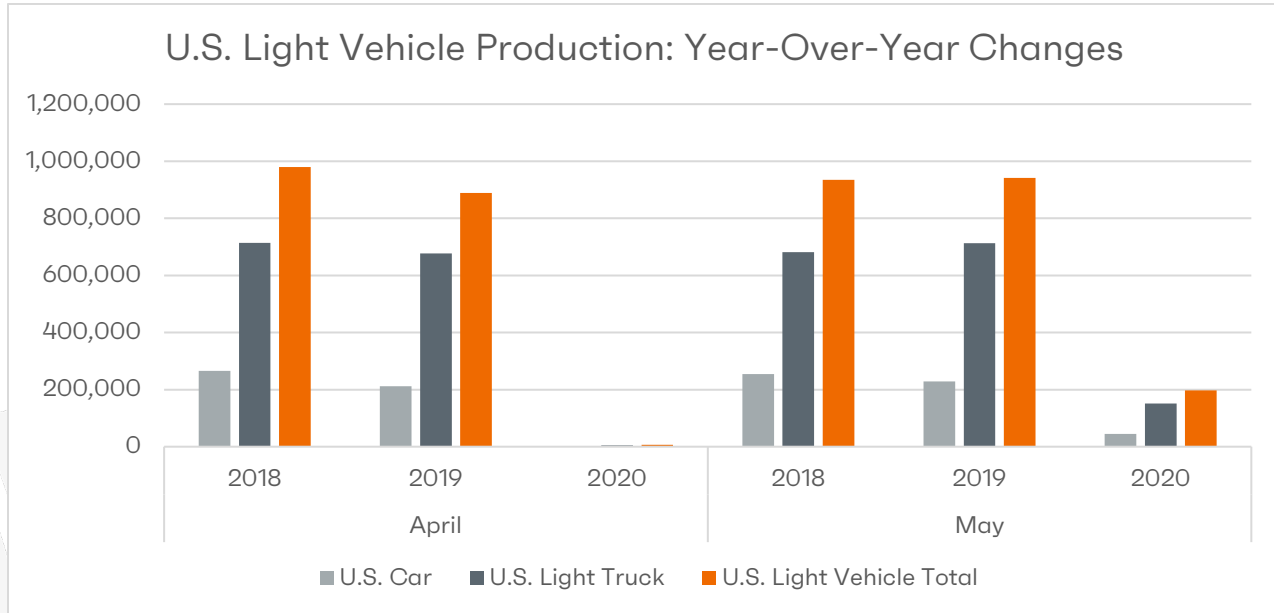


Production Meter

U.S. Light Vehicle Production (Updated 6/19)

U.S. Light vehicle production dropped 79% year-over-year in May, and 83% in North America overall. While nearly all OEMs restarted production in the U.S. and across North America in the month, production was down, year-over-year, in the range of 70%-98% for manufacturers. The light vehicle production total for North America was less than 250,000 (57,660 cars; 190,942 light trucks), and for the U.S., less than 200,000 (45,151 cars; 151,688 light trucks)

“May’s weak performance caused the U.S. 5-month total to fall 41.7% below year-ago. . . . North American year-to-date production after five months totaled 4,028,697, 42.8% below like-2019’s 7,043,810.”^{xxvi}



U.S. Light Vehicle Inventory and Days’ Supply (Updated 7/8)

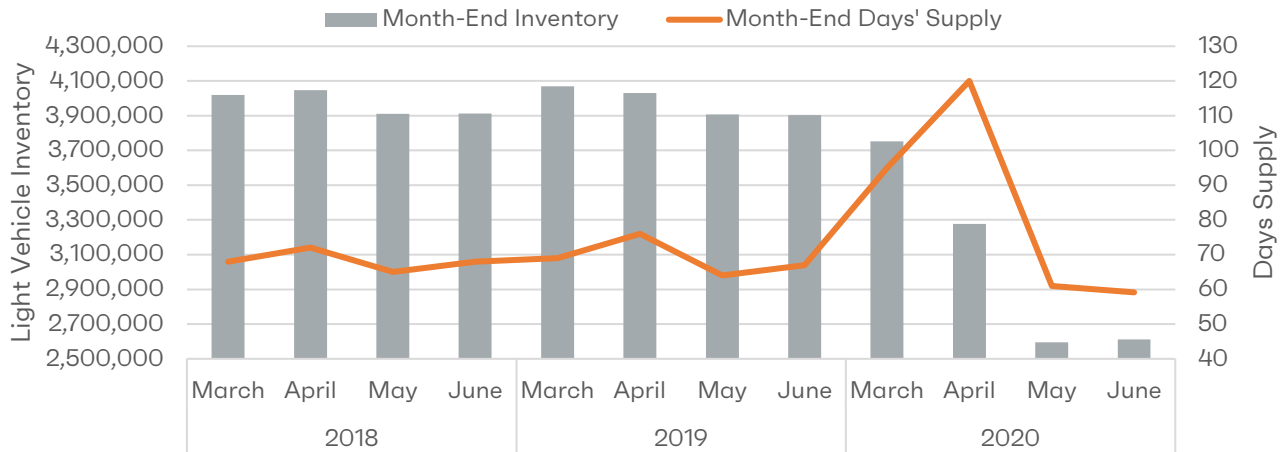
June Inventory Update: “U.S. light-vehicle inventory on June 30 remained relatively flat with May, meaning dealers will still be wanting on several vehicle lines in July. . . . June 30 inventory totaled 2.61 million units, a smidgeon above May’s 2.60 million, but 33.1% below like-2019’s 3.90 million. May inventory also was 33% below the year-ago total. Showing that dealers were stretching to meet demand was June’s days’ supply falling to 59, lowest for the month since the same total in 2014, and well below like-2019’s 67.”

“Based on the current North American production outlook, and estimated import shipments, inventory is not expected to begin making significant upward gains until the end of the summer. In fact, it could still be at roughly 30% below the same year-ago level at the end of July.

“Import shipments, probably due to the virus impacting other parts of the world before the U.S., which also meant those areas could reboot manufacturing sooner, have been flowing relatively free compared with the supply disruptions caused by Q2 production stoppages in North America.

“Import inventory ended June down 15.6% from same-month 2019, while locally produced stock was down 37.5%.”^{xxvii}

U.S. Light Vehicle Inventory & Days' Supply: Year-Over-Year Changes

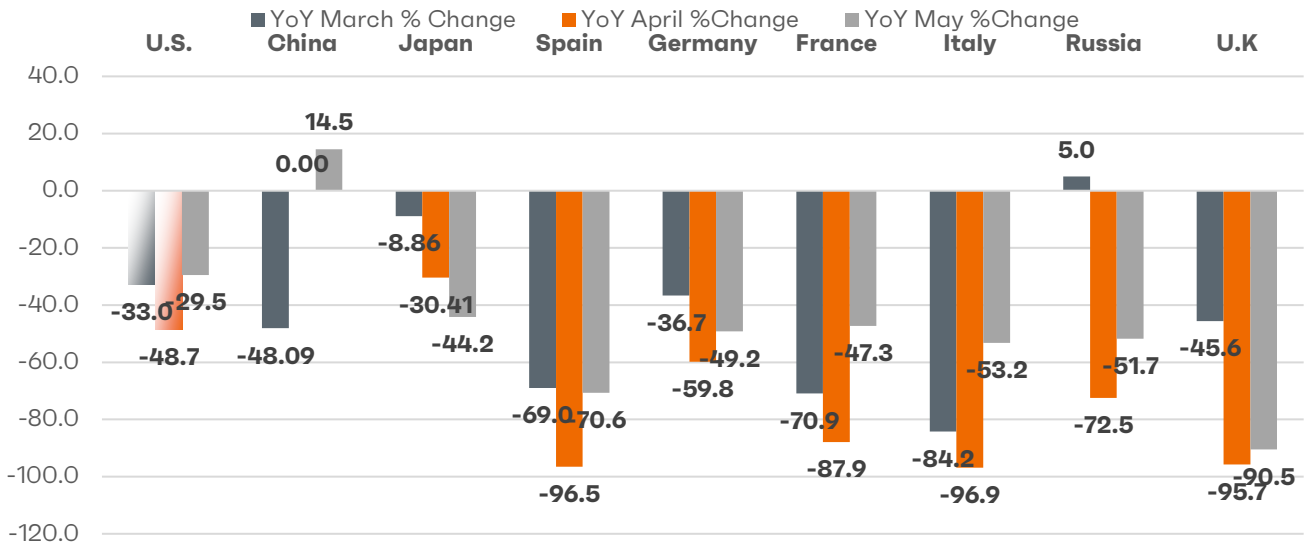


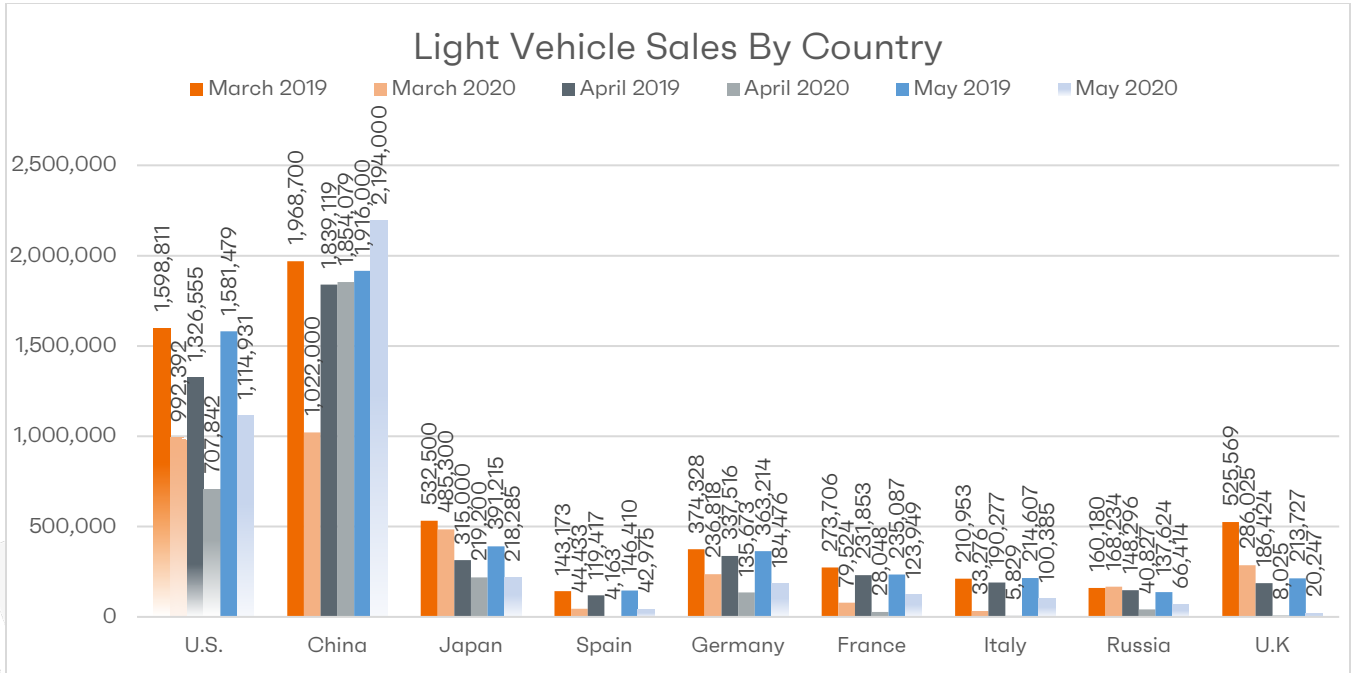
xxviii

Global Meter (New 6/24)

Sales in select countries around the globe, including year-over-year percent change by month as well as raw volume by month:

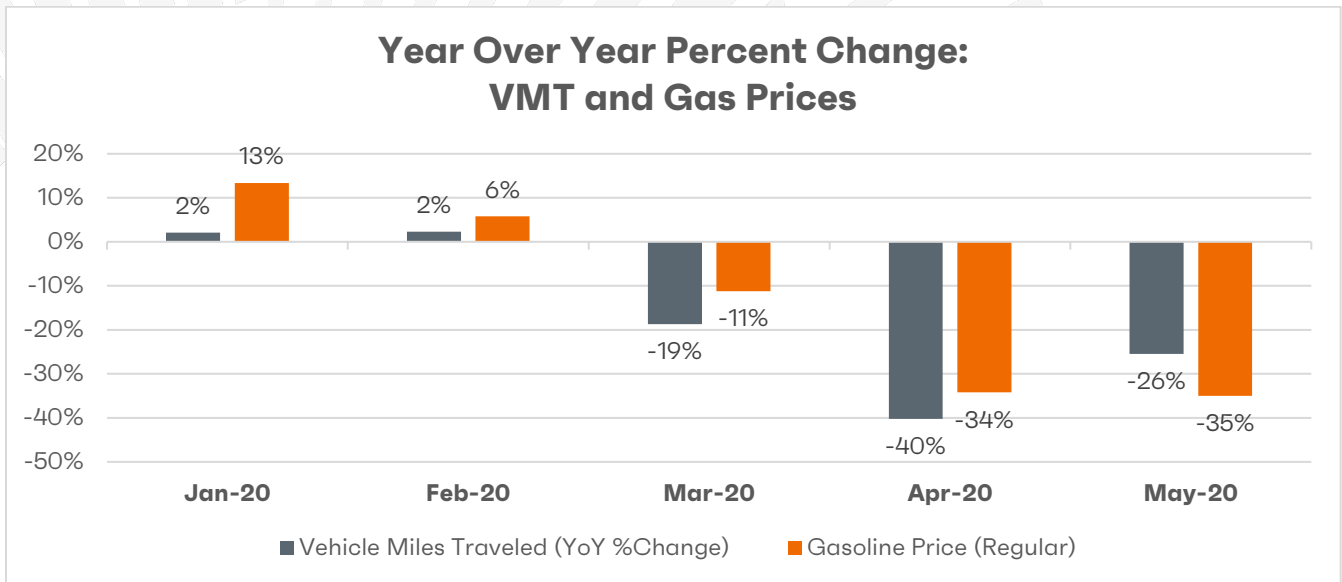
Light Vehicle Sales By Country: Year-Over-Year Percent Change By Month





Travel Meter (Updated 7/8)

“U.S. motorists drove less in May year-over-year, according to the Department of Transportation. Travel on all public roads fell 25.5% in May from the same month last year. Travel totaled 213.2 billion miles in May.”^{xxix}



- ⁱ WardsIntelligence, "U.S. Light Vehicle Sales, March," 4/1/2020; WardsIntelligence, "U.S. Light vehicle Sales, April," 5/1/2020
- ⁱⁱ Haig Stoddard, "COVID-19 Impact Will Tank March, Second-Quarter U.S. Light-Vehicle Sales," *WardsIntelligence*, 3/25/20; Haig Stoddard, "March 25 COVID-19 Update: 2020 North America Production, U.S. Sales Forecasts," *WardsIntelligence*, 3/30/20; Haig Stoddard, "U.S. Light-Vehicle Sales Start on the Road Back in May," *WardsIntelligence*, 5/21/20
- ⁱⁱⁱ Haig Stoddard, "COVID-19's Toll on North America Vehicle Production in March, Q2," *WardsIntelligence*, 3/30/20
- ^{iv} Haig Stoddard, "Covid-19: Revised Outlook for U.S. Light-Vehicle Sales in 2020, 2021," *WardsIntelligence*, 5/27/2020
- ^v Haig Stoddard, "Third-Quarter North American Production Outlook Improves as Automakers Get a Better Handle on Covid-19 Conditions," *WardsIntelligence*, 6/3/2020
- ^{vi} Source: WardsIntelligence, "U.S. Vehicle Sales by Vehicle Type and Source, 1931-2019," 2/11/20; Haig Stoddard, "Covid-19: Revised Outlook for U.S. Light-Vehicle Sales in 2020, 2021," *WardsIntelligence*, 5/27/20
- ^{vii} J.D. Power, "[Auto Industry Impact Report: July 5, 2020](#)," 7/8/2020
- ^{viii} WardsIntelligence, "U.S. Light Vehicle Sales, June 2020," 7/1/20; WardsIntelligence, "U.S. Light Vehicle Sales, June 2018, 7/3/18
- ^{ix} Haig Stoddard, "U.S. Light-Vehicle Sales Continue to Ramp-Up in June," *WardsIntelligence*, 7/1/2020
- ^x Haig Stoddard, "U.S. Light-Vehicle Sales Continue to Ramp-Up in June," *WardsIntelligence*, 7/1/2020
- ^{xi} J.D. Power, "J.D. Power Auto Industry Impact Report," 6/4/2020
- ^{xii} Haig Stoddard, "U.S. Light-Vehicle Sales Start on the Road Back in May," *WardsIntelligence*, 5/21/20
- ^{xiii} Haig Stoddard, "U.S. Light-Vehicle Sales Continue to Ramp-Up in June," *WardsIntelligence*, 7/1/2020
- ^{xiv} WardsIntelligence, U.S. Light Vehicle Sales, January 2013 – December 2019
- ^{xv} U.S. Energy Information Administration, Weekly Retail Gasoline and Diesel Prices, Regular price per gallon, including taxes
- ^{xvi} WardsIntelligence, Fuel Economy Index, December 2013 & 2019
- ^{xvii} Alliance for Automotive Innovation, compiled from company reports, 7/8/2020
- ^{xviii} Haig Stoddard, "U.S. Light-Vehicle Sales Continue to Ramp-Up in June," *WardsIntelligence*, 7/1/2020
- ^{xix} Kelley Blue Book, Press Release, "Average New-Vehicle Prices Up 3% Year-Over-Year in June 2020, According to Kelley Blue Book," 7/1/2020; Kelley Blue Book, Press Release, "Average New-Car Prices Up 3% Year-Over-Year for June 2019, According to Kelley Blue Book," 7/2/19
- ^{xx} J.D. Power, "[Auto Industry Impact Report: July 5, 2020](#)," 7/8/2020
- ^{xxi} Haig Stoddard, "U.S. Light-Vehicle Sales Continue to Ramp-Up in June," *WardsIntelligence*, 7/1/2020
- ^{xxii} Bankrate, "[Current Car Loan Interest Rates](#)," Accessed 6/24/20; Internet Archive, Bankrate, "Current Car Loan Interest Rates, cached image from July 24, 2019
- ^{xxiii} J.D. Power, "[Auto Industry Impact Report: July 5, 2020](#)," 7/8/2020
- ^{xxiv} Stephen Cunningham, "U.S. Slashes 2020 Oil-Output Forecast Ahead of OPEC+ Meeting," *Bloomberg*, 4/7/20
- ^{xxv} U.S. Energy Information Administration, Regular Gasoline, https://www.eia.gov/dnav/pet/pet_pri_gnd_dcus_nus_m.htm, Accessed 7/8/20; U.S. Energy Information Administration, Daily Cushing, OK WTI Spot Price, <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=RWTC&f=W>, Accessed 7/8/20; YCharts, https://ycharts.com/indicators/wti_crude_oil_spot_price, Accessed 5/20/20
- ^{xxvi} Keith Lowe, "North America Decreases LV Production in May," *WardsIntelligence*, 6/18/2020; WardsIntelligence, "North America Production, May 2020," 6/18/2020
- ^{xxvii} Haig Stoddard, "No Improvement to U.S. Light-Vehicle Inventory Heading Into July," *WardsIntelligence*, 7/2/20
- ^{xxviii} WardsIntelligence, "U.S. Light Vehicle Inventory, March 2020," 4/2/2020; WardsIntelligence, "U.S. Light Vehicle Inventory, April 2018," 5/3/18; WardsIntelligence, "U.S. Light Vehicle Inventory, May 2020," 5/21/2020; WardsIntelligence, "U.S. Light Vehicle Inventory, May 2018," 6/5/18; WardsIntelligence, "U.S. Light Vehicle Inventory, June 2020," 7/2/20; WardsIntelligence, "U.S. Light Vehicle Inventory, June 2018," 7/5/18
- ^{xxix} Chris Middleton, "U.S. May Motor Vehicle Travel Miles: Summary," *Bloomberg Government*, 7/8/2020